

Application No: 10/566,624
Amendment A
Reply to Office Action Dated 11/29/2007

Attorney Docket No: 3926.237

REMARKS

Claims 16-23 and 25-30 are now pending in the application. Claims 16-23 and 25-30 have been amended. Claims 1-15 have been previously cancelled and claim 24 has now been cancelled.

Claim Rejections - 35 U.S.C. § 103

Claims 16-30 have been rejected under 35 USC 103(a) as being unpatentable over Popoola et al. ("Novel Powertrain Applications of Thermal Spray Coatings," Surface Engineering, 1998, pages 107-112, Vol. 14, No. 2, The Institute Of Materials, London) in view of Weintz et al. (EP 0,338,204 A2) or Liang et al. (EP 1,172,452 A2) or Ohashi (JP 01138095 A) and Palma (US 5,915,743) or Hycner (US 6,240,639) or Watchko et al. (US 6,763,576) or Fleri (US 4,724,819).

The claims have been amended in an effort to even more clearly define the present invention. More specifically, the amended independent claim 25 now recites a process for producing a thermal sprayed valve seat ring, said process comprising:

deposition the valve seat ring by an arc wire spray process, with a Co-rich filled wire and a Cr and/or Ni rich filled or solid wire, as a homogenous layer of a Co/Mo base alloy upon a substrate material of a cylinder head,

wherein said filled wires comprise a jacket and a filler, and wherein a substantial proportion of the Co in the deposited layer is supplied by the jacket of the filled wire.

According to the present invention, the valve seat ring is made of very hard and friction wear resistant (durable) Co/Mo base alloy upon a substrate material of a cylinder head. As deposit process, the arc wire spray process is employed, in which a Co-rich filled wire and a Cr and/or Ni rich filled or solid wire are used and a substantial proportion of the Co in the deposited

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layer is supplied by the jacket of the filled wire. A combination of these features is not disclosed by any of the cited references, whether alone or in any combination.


The advantages of the present invention are described in, for example, paragraphs [0009] and [0025] to [0027] of the specification of the instant application.

Claim 25 is, therefore, believed to be patentable over the art and since all the dependent claims are ultimately dependent on claim 25, they are believed to be patentable as well.

The Commissioner is hereby authorized to charge any fees which may be required at any time during the prosecution of this application without specific authorization, or credit any overpayment, to Deposit Account Number 50-0951.

Favorable consideration and early issuance of the Notice of Allowance are respectfully requested. Should further issues remain prior to allowance, the Examiner is respectfully requested to contact the undersigned at the indicated telephone number.

Respectfully submitted,



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Yonghong Chen
Registration No. 56,150
Akerman Senterfitt
Customer No. 30448
222 Lakeview Avenue, Suite 400
West Palm Beach, FL 33401
Phone: 561-653-5000
Fax: 561-659-6313

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